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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,980	10/21/2003	Hideyumi Matsumura	MATSUMURA2	4187
1444	7590	10/11/2005	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			ROSS, DANA	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/688,980	Applicant(s) MATSUMURA ET AL.	
	Examiner Dana Ross	Art Unit 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The objection to the specification is withdrawn due to Applicant's amendment dated 8 September 2005.

Drawings

2. The replacement drawing sheets adding "prior art" labels to figures 4 and 5 were received on 8 September 2005. These drawings are acceptable.

The objection to the drawings is withdrawn due to Applicant's amendment dated 8 September 2005.

Claim Objections

3. Claim 2 is objected to because of the following informalities: The second to last line of claim 2 states "at lest a part...". It appears this should be "at least a part". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4, it is not clear what is meant by "the bifurcated spray ports are pumped in each of the tools". It is not clear how a "spray port" can be "pumped". It is not clear if Applicant is referring to the oil pump 85 and water pump 90 which pumps the coolant to the tool. For the

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purpose of this examination, the claim will be read to mean that the coolant is pumped to the tool through the operation of the oil pump 85 and water pump 90.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over by US Pat.

No. 6,287,058 (Arai et al., hereafter '058) in view of EP 1 103 343 A1 (Nakamura et al., hereafter '343) in further view of USA Pat. No. 4,535,216 (Cassidenti, hereafter '216).

'058 teaches a tool (fig. 1, for example) and tool mount (fig. 9, for example) with coolant supply passages with a generic mist-generating device 152 (see col. 4, lines 43-46, for example) with generic cutting tools 13 (see fig. 10, for example). '058 also teaches the use of nozzles 56 at the end of coolant passages to discharge the coolant (see fig. 6, for example) providing a smaller diameter than the coolant passages.

'343 teaches a specific mist-generating device with an oil coated water droplet generator/mixer 1, an oil atomizing chamber 8, water droplet generation chamber 36, top nozzle 4, oil pump 85 and water pump 90 (see fig. 1 and 2).

It is noted that the US equivalent document for '343 is US Pat. No. 6,557,784 (Nakamura et al.).

Examiner notes that it is very well known in the art to have cutting tools with fluid passages for cooling (see previously cited US Patents 6,602,031 and 6,582,167).

'216 teaches it is well known to have a cutting insert with bifurcated fluid passages 38 and 44 (see col. 4, lines 64-68, for example).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the generic mist generating device as taught by '058 with the specific generating device as taught by '343 for the purpose of providing a specific mist generating device in place of the generic mist generating device for the purpose of forming a thin oil film on a surface of water with a minimum amount of oil to reduce the amount of oil used (see '343, col. 2, line 6-12, for example) and for reducing the amount of wasted cutting fluid (see '058 col. 1, lines 60-67, for example).

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the generic insert as taught by '058 with the specific insert as taught by '216 for the purpose of providing higher metal removal rates, less power consumption, improved tool life and the ability to machine harder materials (see '216, col. 3, lines 35-40, for example).

Response to Arguments

8. Applicant's arguments with respect to claims 2-4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



dmr

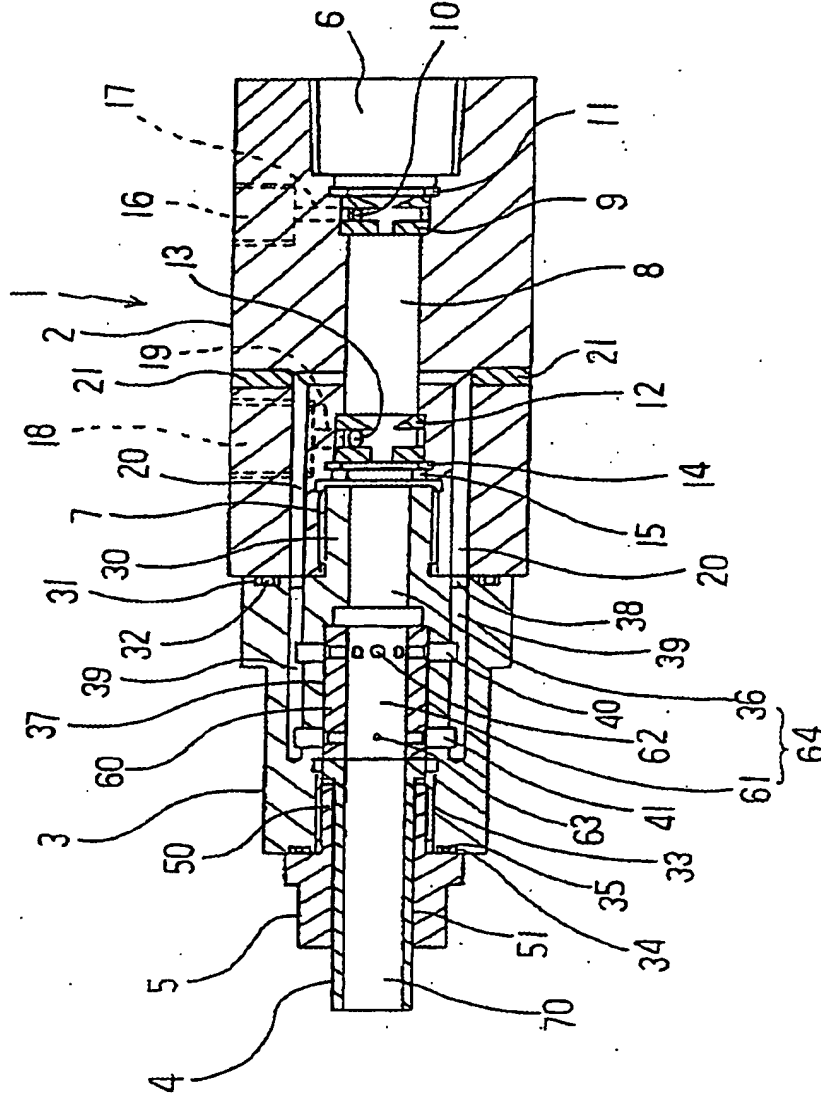


BOYER D. ASHLEY
PRIMARY EXAMINER

App'd
9/23/05



FIG.4 (PRIOR ART)



Add
 9/23/05
 PL

FIG.5 (PRIOR ART)

